



## Project Profile

### Rehoboth Beach, Delaware

Replacement Water Supply and Treatment System



Population growth and the need for more sophisticated treatment prompted the City of Rehoboth to update their water treatment and delivery system. In a public bid, the City awarded a \$5.5M contract to Layne Christensen Company to provide three new wells with a combined output of 2450 gpm. The project also included the abandonment of two existing wells and the construction of a new 4 MGD Water Treatment Plant.

The water treatment plant removes CO<sub>2</sub> and Lindane (a semi-volatile pesticide), and also includes a chemical feed system. The system provides disinfection with sodium hypochlorite, pH control with sodium hydroxide, corrosion control through the addition of phosphate and also adds sodium fluoride.

CO<sub>2</sub> removal is accomplished with two 2 MGD Packed Column Air Strippers, which will also provide VOC removal if needed. Following pilot testing with Norit carbon, Lindane is now removed with four 1MGD carbon adsorption units (recognized as the best available technology for Lindane removal). The two air strippers and the four GAC adsorption vessels were fabricated in Layne's ASME-certified facility in Bridgewater, New Jersey.

Concrete work was awarded to Reynolds, Inc.

Start Date: Sept 2007

Completion Date: July 2009

**General Contractor:**

Layne Christensen Company  
Project Manager - Neil Winner  
Project Superintendent - Ken Swisher  
Design Engineer - Rich Sharkey  
Construction Manager -  
Dave Schrettner

Owner: City of Rehoboth Beach, DE

Engineer: Davis, Bowen & Friedel, Inc.

Contract Amount: \$5.5M



Overhead view during construction shows air strippers in foreground.



Interior view of completed facility process piping.

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#### Layne Christensen Company

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